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EXAMINER	
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ART UNIT	PAPER NUMBER
2181	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

## Office Action Summary	Application No. 10/681,548	Applicant(s) RIGGINS ET AL.	
	Examiner Mohammad O. Farooq	**Art Unit** 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The use of the trademark/tradename "Cisco, CNS, IE2100, RADIUS, TLV, and CDP" has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9, 16, 21, 32, 39, 44 and 45 contains the trademark/trade name(s). Claims 9, 16, 21, 32, 39 and 44 contain Cisco Discovery Protocol or CDP and claims 9, 16, 32 and 39 contain TLV. Furthermore, where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade names are used to identify/describe various protocols and, accordingly, the identification/description is indefinite. Appropriate correction is therefore required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 24-45 are rejected under 35 U.S.C. 101 because the claims are not limited to tangible embodiments. In view of applicant's disclosure, specification (paragraph 84 and 85), the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (for example, floppy disk, flexible disk, hard disk, magnetic tape, CD-ROM, punch cards, paper tape, RAM, PROM, EPROM and FLASH-ROM) and intangible embodiments (for example, acoustic or light waves, radio wave and infrared data communication). As such, the claim is not limited to statutory subject matter and is therefore non-statutory. To overcome this rejection the claims need to be amended to include only the physical computer media and not a communication/transmission media or other intangible or non-functional media.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. As to claim 1, Sato teaches method for automatically configuring a port of a network element, comprising the steps of:

discovering information that identifies or describes a device type of a second network element that is coupled to a port of a first network element (item 50 is connected to item 60; fig. 1);

associating the port with a port role definition selected from a plurality of port role definition based on the discovered information (port role definition defined as management table; fig. 3A);

retrieving zero or more configuration settings that are associated with the selected port role definition (fig. 3A has plurality of information associated with a port); and

applying the zero or more configuration settings to the port (fig. 3A has plurality of information associated with a port).

6. As to claim 2, Sato teaches, wherein the step of associating a port with a port role definition (configuration file is same as definition file, fig. 3A) comprises the steps of:

mapping the port to a profile selected from a plurality of profiles based on the discovered information (see fig. 3A); and

matching the profile to a port role definition (fig. 3A).

7. As to claim 3, Sato teaches, wherein a profile comprises a profile identifier, and one or more rules that maps one or more ports to the profile based on the discovered information (each port has plurality of information or file associated with it; fig. 3A).

8. As to claim 4, Sato teaches, wherein a port role definition comprises a port role definition identifier, and one or more configuration values that can be applied to a port that is associated with the port role definition (fig. 3A).

9. As to claim 5, Sato teaches, wherein the configuration values comprise one or more configuration attributes and value pairs for the port (fig. 3A).

10. As to claim 6, Sato teaches, wherein the configuration values comprise one or more quality of service values for the port (state and instruction values in fig. 3A).

11. As to claim 7, Sato teaches, wherein the configuration values comprise one or more lines of the configuration language of the network element (plurality of configuration information in fig. 3A).

12. As to claim 8, Sato teaches, wherein the discovered information comprises a type identifier of the second element (configuration procedure; fig. 3B); and an identity identifier of the second element (apparatus type information; fig. 3B)

13. As to claim 10, Sato teaches, further comprising the steps of:

providing the discovered information to a management application (paragraph 0012);

receiving zero or more configuration settings from the management application (fig. 3A has plurality of information associated with each port).

applying the configuration settings to the port (fig. 3A).

14. As to claim 11, Sato teaches, wherein the additional configuration settings are generated based on the discovered information (see fig. 3A; item 1308, fig. 9).

15. As to claim 12, Sato teaches, wherein the first element is programmed to automatically configure a selection of one or more ports from a plurality of ports (see fig. 3A).

16. As to claim 13, Sato teaches, wherein the steps are performed when the first network element boots up (fig. 8).

17. As to claim 14, Sato teaches, wherein the steps are performed for a particular port of the first network element when said port becomes active after a period of inactivity (fig. 9; paragraph 0106).

18. As to claim 15, Sato teaches method, wherein the steps are performed at a specified period time interval (paragraph 0106).

19. As to claims 19 and 20, Sato teaches method, wherein the first network element is a switch or router and the second network element is a personal computer, phone, router, server, or storage device (paragraph 0009 and 0072).

20. As to claim 21, Sato teaches method, wherein the step of discovering is performed by a protocol selected from the set consisting of Cisco Discovery Protocol, Network-Based Application Recognition, 802.1x, and Simple Network Management Protocol (SNMP, paragraph 0115).

21. As to claim 23, Sato teaches method for automatically configuring one or more ports of a packet data router, comprising the computer-implemented steps of:

discovering device type information about a port of the router, using a discovery protocol (items 50 and 60; fig. 1 and fig. 3A);

based on the device type information, and a mapping, selecting a port role definition from among a plurality of stored port role definition, wherein each of the port role definitions is associated with one or more stored configuration commands that reflect an abstract role played by the port when connected to another device (items 50 and 60, fig. 1 and fig. 3A);

receiving zero or more stored network device configuration commands that are associated with the port role definition (fig. 3A has plurality of information associated with each port);

applying the received configuration commands to the port (fig. 3A).

22. As to claim 24, Sato teaches medium carrying one or more sequences of instructions for automatically configuring a port of a network element, which instructions, when executed by one or more processors (fig. 4, item 56; fig. 7, element 1002), cause the one or more processors to carry out the steps of:

discovering information that identifies or describes a device type of a second network element that is coupled to a port of a first network element (element 50 is connected to element 60);

associating the port with a port role definition selected from a plurality of port role definitions based on the discovered information (port role definition defined in management table; fig. 3A);

retrieving zero or more configuration settings that are associated with the selected port role definition (see fig. 3A); and

applying the zero or more configuration settings to the port (3A).

23. As to claim 46, Sato teaches apparatus for automatically configuring a port of a network element, comprising:

means for discovering information that identifies or describes a device type of a second network element that is coupled to a port of a first network element (item 50 is connected to item 60; fig. 1);

means for associating the port with a port role definition selected from a plurality of port role definition based on the discovered information (plurality of information associated with each port is provided in fig. 3A);

means for retrieving zero or more configuration settings that are associated with the selected port role definition (port role definitions defined in management table, fig. 3A); and

means for applying the zero or more configuration settings to the port (fig. 3A).

24. As to claim 47, Sato teaches apparatus for automatically configuring a port of a network element, comprising:

a network interface that is coupled to the data network for receiving one or more packet flows therefrom (interconnecting device 30, fig. 4);

a processor (controller item 51; fig. 4);

one or more stored sequences of instructions which, when executed by the processor, cause the processor to carry out the steps of:

discovering information that defines or describes a device type of a second network element that is coupled to a port of a first network element (item 50 is connected to item 60, fig. 1);

associating the port with a port role definition selected from a plurality of port role definitions based on the discovered information (port role definitions defined in management table, fig. 3A);

retrieving zero or more configuration settings that are associated with the selected port role definition (plurality of information associated with each port is provided in fig. 3A); and

applying the zero or more configuration settings to the port (fig. 3A).

25. Claims 25-31, 33-38 and 42-44 are similar in limitations as claims 1-8, 10-15 and 19-21. Sato teaches method as set forth in claims 1-8, 10-15 and 19-21. Therefore, Sato also teaches medium as set forth in claims 25-31, 33-38 and 42-44.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

26. Claims 9, 16-18, 22, 32, 39-41 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato US 2003/0012182 A1, in view of Nomura US 2003/0188017.

27. As to claim 9, Sato does not teach method, wherein the type identifier of the second element is the capabilities TLV or platform TLV of a CDP message from the second element; wherein the identity identifier of the second element is the sysName TLV of a CDP message from the second element.

However, Nomura teaches method, wherein the type identifier of the second element is the capabilities TLV or platform TLV of a CDP message from the second element; wherein the identity identifier of the second element is the sysName TLV of a CDP message from the second element (similar in functionality because of identifying information; paragraph 0012; 0013 and 0015; modules in item 30, fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Sato and Nomura because that would enable each user to arbitrarily select the Internet connecting device exhibiting a higher communication speed in preference to other circumstances in accordance with a user's own convenience, and can also select the Internet connecting device to which the minimum connection fee is set in preference to other circumstances (paragraph 0016).

28. As to claim 16, Sato does not teach method, wherein the step of discovering information comprises the steps of Querying a Cisco Discovery Protocol (CDP) cache of the first element to obtain a Capabilities type-length-value (TLV) and a sysName TLV.

However, Nomura teaches method, wherein the step of discovering information comprises the steps of Querying a Cisco Discovery Protocol (CDP) cache of the first element to obtain a Capabilities type-length-value (TLV) and a sysName TLV (paragraph 0012, 0013 and 0015). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Sato and Nomura because that would enable each user to arbitrarily select the Internet connecting device exhibiting a higher communication speed in preference to other circumstances in accordance with a user's own convenience, and can also select the Internet connecting device to which the minimum connection fee is set in preference to other circumstances (paragraph 0016).

29. As to claims 17 and 18, Sato does not teach method, wherein the profile further comprises a counter indicating a number of ports to which the profile is currently mapped and wherein the steps of retrieving and applying are performed only when the counter is less than or equal to one.

However, Nomura teaches method, wherein the profile further comprises a counter indicating a number of ports to which the profile is currently mapped and wherein the steps of retrieving and applying are performed only when the counter is less than or equal to one (via communication selection; fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Sato and Nomura because that would enable each user to arbitrarily select the Internet connecting device exhibiting a higher communication speed in preference to other circumstances in accordance with a user's own convenience, and can also select the Internet connecting device to which the minimum connection fee is set in preference to other circumstances (paragraph 0016).

30. As to claim 22, Sato does not teach method, wherein the step of discovering is performed by Simple Network Management Protocol, and wherein the discovered information comprises a sysDescr object and sysObjectID of a MIB of the second network element.

However, Nomura teaches method, wherein the step of discovering is performed by Simple Network Management Protocol, and wherein the discovered information comprises a sysDescr object and sysObjectID of a MIB of the second network element. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Sato and Nomura because that would enable each user to arbitrarily select the Internet connecting device exhibiting a higher communication speed in preference to other circumstances in accordance with a user's own convenience, and can also select the Internet connecting device to which the minimum connection fee is set in preference to other circumstances (paragraph 0016).

31. Claims 32, 39-41 and 45 are similar in limitations as claims 9, 16-18 and 22. Sato and Nomura in combination teach method as set forth in claims 9,16-18 and 22. Therefore, Sato and Nomura in combination also teach medium as set forth in claims 32, 39-41 and 45.

Response to Arguments

32. Applicant's arguments with respect to claims 1-47 have been considered but are moot in view of the new ground(s) of rejection.

33. As to the applicants' remarks regarding tradename, one should not need to look into the appendix in order to discern what the tradename means. Therefore, the examiner has maintained the objection to the specification and the rejection of claims 9, 16, 21, 32, 39, 44 and 45 under 35 U.S.C. 112 second paragraph. Applicant is requested to incorporate appropriate corrections.

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad O. Farooq whose telephone number is (571) 272-4144. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohammad O. Farooq
February 23, 2006

KIM HUYNH
SUPERVISORY PATENT EXAMINER

3/2/06